

ABSTRACT

A metering pump system for metering and pumping a metered volume of a fluid product has a storage chamber for storing the fluid product in; a metering chamber which is movable between a contracted state and an expanded state, the system adapted such that movement of the metering chamber from its contracted state to its expanded state results in the metering chamber being placed in fluid communication with the storage chamber to enable the metering chamber to receive an excess volume of the fluid product that includes the metered volume and a surplus volume from the storage chamber and movement of the metering chamber from its expanded state to its contracted state causes the metered volume to be pumped from the metering chamber; a bleed mechanism; and an inlet valve mechanism.